

TUTU WELLFIELD VIRGIN ISLANDS

EPA ID# VID982272569



EPA REGION 2
CONGRESSIONAL DIST. 01
Tutu, eastern central St. Thomas

Site Description

The Tutu Wellfield site, located in a mountainous commercial/residential area, is comprised of a plume of contaminated groundwater covering an area approximately 108 acres in size. This contamination was first detected when a strong petroleum odor coming from the Tillet Well, a public water supply for the area, was reported. An investigation conducted by the Virgin Islands Department of Planning and Natural Resources (VIDPNR) indicated that volatile organic compounds (VOCs) were contaminating several public, institutional, commercial, and private wells. Water from some of these wells was transported to other parts of the island. Many contaminated wells, including the Tillet Well, were subsequently shut down. In 1987, an Administrative Order was issued to two potentially responsible parties (PRPs), Tutu Texaco Service Station and Tutu Esso Car Care Center. This order required them to investigate the impact that the release of petroleum from their underground storage tanks (USTs) and VOCs have on the surrounding environment. Additional PRPs identified by EPA include: two auto repair stations, a dry cleaner, and a government maintenance center. These operations contain various possible sources of contamination such as petroleum and waste oil USTs, drum storage areas, contaminated catch basins, oil separators, floor drains, a sump holding tank, a leaching pit, above-ground storage tanks, and an evaporation pit. These operations also involved various toxic materials, including solvent-based auto flushes, dry cleaning fluids, and dye strippers. Tutu Wellfield is part of the Upper Turpentine Run Basin. A stream leading to Turpentine Run is a few hundred feet from the site; Turpentine Run is approximately 3 miles from Mangrove Lagoon, which is hydraulically connected to the Caribbean Sea. The Atlantic Ocean is one mile from the site. Public and private wells within 4 miles of the site formerly supplied drinking water to an estimated 1,600 people.

Site Responsibility:

This site is being addressed through
Federal and responsible party actions.

NPL LISTING HISTORY

Proposed Date: 02/06/92

Final Date: 09/29/95

Threats and Contaminants



Groundwater, including several wells, is contaminated with VOCs, such as benzene, toluene, perchloroethylene (PCE), 1,2-dichloroethene (DCE) and trichloroethene (TCE). Contaminants found in the groundwater were also detected in the soil on the properties of the various PRPs.



Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status



Immediate Actions: In response to the detection of contaminants in groundwater, VIDPNR closed down the Tillet Well, three private wells, and 13 commercial wells in 1987. EPA followed this action up with the decontamination of five residential cisterns using CERCLA Removal funds. An alternative water supply was provided to these residences while monitoring of the remaining wells continued. In March 1990, EPA issued an Administrative Order to three PRPs (Esso, Texaco and L'Henri Dry Cleaner) to take over the monitoring program and to provide trucked water to additional residences affected by contamination in groundwater. An Escrow Agreement was signed by the three PRPs in February 1994 to provide trucked water to the affected residences until their wells are restored to potable use.

Site Facts: VIDPNR issued an Administrative Order to Tutu Service Station and Tutu Esso Car Care in 1987. This order required the PRPs to investigate the impact that the release of petroleum from their USTs had on the surrounding environment. Seven additional PRPs were identified later on in 1987. A unilateral Administrative Order was issued in 1990 by EPA to L'Henri Dry Cleaners, Esso Standard Oil Co., and Texaco Caribbean Inc. These PRPs were required to take over the removal actions initiated by EPA in 1990. In February 1992, EPA negotiated an Administrative Order on Consent with Texaco Caribbean Inc. and Esso Standard Oil Company to conduct a Remedial Investigation/Feasibility Study (RI/FS) to determine the nature and extent of contamination and to identify alternatives for cleanup. The Remedial Investigation was completed in January 1995 and the Feasibility Study was completed in September 1995. Due to the effects of Hurricane Marilyn, issuance of the Record of Decision was postponed. EPA reissued the Proposed Plan on February 12, 1996 and the public meeting was held on March 5, 1996. The Record of Decision was signed on August 5, 1996. The ROD calls for extraction and treatment of contaminated groundwater and soil vapor extraction of contaminated soils.

Cleanup Progress



Immediate actions such as the closing down of contaminated wells and the provision of safe drinking water to affected residence have reduced the risk posed to the health and safety of the nearby population while additional site investigations are being conducted.

An Administrative Order was issued to L'Henri Dry Cleaners in March 1995 to conduct an interim remediation of soils at this facility. Approximately 700 cubic feet of contaminated soil was excavated. On-site treatment using soil venting has been initiated. Quarterly monitoring and sampling of the soil pile commenced in May 1995.

The RI/FS was completed in August 1995. The Record of Decision was signed on August 5, 1996. EPA initiated the remedial design of the Site-wide groundwater remediation and the remedial design of the soil remediation at the Curriculum Center in October 1997. Pre-design field work completed October 1999. Remedial design for the groundwater treatment and the soil remediation were completed in Fall 2001. EPA is awaiting funding to commence the site-wide groundwater remedial action and the soil remedial action at the Curriculum Center.

Four Administrative Orders were issued on May 18, 1998 to Texaco, ESSO Service Stations to perform soil and groundwater cleanups at their facilities and L'Henry Cleaners and the owners of the property, Cyril V. Francois Associates, Four Winds Shopping Center and the Western Auto Supply Company to perform soil cleanup at their facilities which are part of the Tutu Wellfield Federal Superfund site. Texaco is operating its treatment unit. ESSO is operating its groundwater treatment, but the SVE system was ineffective in treating the impacted soils. Therefore, ESSO submitted a modification to excavated the impacted soils. Excavation is completed. Western Auto/Four Winds Plaza and L'Henri Cleaners completed their pre-design field investigating. No further works are required to their facilities pursuant to the Administrative Orders.

Site Repository



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